

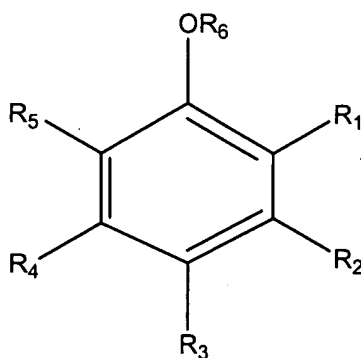
IN THE SPECIFICATION:

Please amend paragraph number [0004] as follows:

[0004] State of the Art: Melt-cast explosives based on a 2,4,6-trinitrotoluene (TNT) melt-cast binder have been used in a wide array of military applications. Among the TNT-based compositions known for making melt-cast explosives, COMP B (also commonly referred to in the art as ~~Composition B~~ Composition B) comprises a mixture of TNT, RDX (1,3,5-trinitro-1,3,5-triaza-cyclohexane), and beeswax. Although the precise concentrations of these ingredients may vary somewhat in industry practice, generally COMP B includes about 39.5 wt% TNT, about 59.5 wt% RDX class 1 (100  $\mu$ m) and about 1 wt% wax.

Please amend paragraph number [0016] as follows:

[0016] Generally, the melt-cast composition comprises from 25 wt% to 45 wt%, more preferably from 30 wt% to 40 wt%, and more preferably about 33.75 wt% of at least one melt-cast binder. Exemplary melt-cast binders suitable for this invention include mononitro-substituted and dinitro-substituted phenyl alkyl ethers having the following formula:

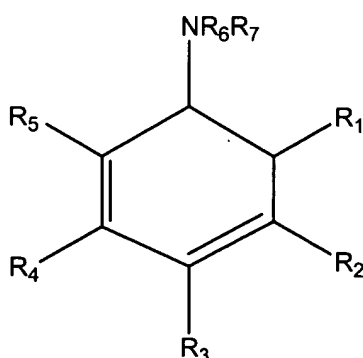


wherein one or two members selected from R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, and R<sub>5</sub> are nitro (-NO<sub>2</sub>) groups, the remaining of R<sub>1</sub> to R<sub>5</sub> are the same or different and are preferably selected from -H, -OH, -NH<sub>2</sub>, NR<sub>7</sub>R<sub>8</sub>, an aryl group, or ~~an alkyl~~ an alkyl group (such as methyl), R<sub>6</sub> is an alkyl group

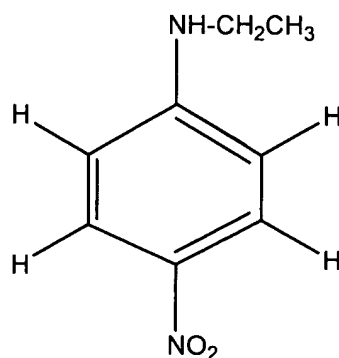
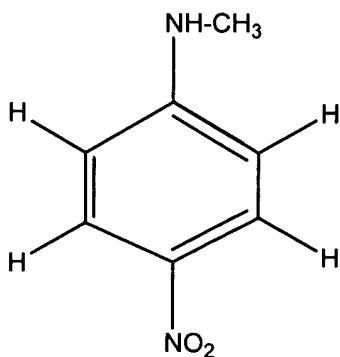
(preferably a methyl, ethyl, or propyl group),  $R_7$  is hydrogen or an alkyl or aryl group, and  $R_8$  is hydrogen or an alkyl group.

Please amend paragraph number [0021] as follows:

[0021] The processing aid of this invention preferably is one or more N-alkyl-nitroanilines and/or N-aryl-nitroanilines having the following formula:



wherein  $R_6$  is hydrogen,  $R_7$  is an unsubstituted or substituted hydrocarbon (e.g., straight-chain alkyl, branched alkyl, cyclic alkyl, or aryl group), and at least one of  $R_1$  to  $R_5$  is a nitro group, the remaining of  $R_1$  to  $R_5$  are the same or different and are preferably selected from -H, -OH, -NH<sub>2</sub>,  $NR_8R_9$ , an aryl group, or an alkyl group (such as methyl),  $R_8$  is hydrogen or an alkyl or aryl group, and  $R_9$  is hydrogen or in alkyl group. Exemplary N-alkyl-nitroaniline processing aids include the following:



N-methyl-p-nitroaniline (MNA)

N-ethyl-p-nitroaniline

Please amend paragraph number [0032] as follows:

**[0032]** The following examples illustrate embodiments which have been made in accordance with the present invention. Also set forth are comparative examples prepared for comparison purposes. The inventive embodiments are not exhaustive or exclusive, but are merely representative of the invention.